# Environmental Assessment MSP-EA-03-01

Proposed Addition to Aerospace Ground Equipment Shop

21 February 2003

934th Airlift Wing U.S. Air Force Reserve Minneapolis-St. Paul International Airport Air Reserve Station Minneapolis, MN 55450-2000

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#### **EXECUTIVE SUMMARY**

This environmental assessment analyzes a proposed Air Force action. The proposed action is construction of an addition to an existing building at Minneapolis-St. Paul International Airport Air Reserve Station (MSP IAP ARS). This existing building, 820, houses Aerospace Ground Equipment (AGE) maintenance activities. This proposed action is not eligible for any of the Air Force's Categorical Exclusions presented in 32 CFR 989, Appendix B. Therefore, an environmental assessment is required.

#### 1. DESCRIPTION OF PROPOSED ACTION

#### 1.1. Purpose of the Proposed Action

The proposed action will add 3,230 square feet for additional maintenance space, storage space, training area, and office space, with all necessary utilities (heating, ventilation, air conditioning, electrical, plumbing and fire protection).

#### 1.2. Need for the Proposed Action

Building 820 was originally constructed in 1979. Requirements for maintenance areas and training space have changed since that time. The AGE shop has been tasked with additional mission requirements (repair of non-powered AGE equipment). A large portion of the AGE equipment must currently be stored at remote locations apart from Building 820, due to the lack of sufficient storage area. The proposed addition is needed to ensure that equipment maintenance and repair can be accomplished in a timely and effective manner, and allow the shop to carry out adequate on-site training for reservist personnel.

## 1.3. Location of the Proposed Action

The proposed action will occur adjacent to existing Building 820, which is located in "Area N" of MSP IAP ARS. Area N is an 88.46 acre tract bounded by the City of Minneapolis on the north, and by the Minneapolis-St. Paul International Airport on the south, east and west. This specific site within Area N is south of 6th Street, between the southern ends of Doolittle Avenue and Apollo Avenue, and adjacent to aircraft parking spot 2A.

#### 2. ALTERNATIVE SELECTION

The proposed action addressed by this environmental assessment is for the Air Force to construct an addition to an existing inadequate facility. The standard for selecting alternatives to be considered was that an alternative must not require more extensive construction and/or renovation than what is contained within the proposed action because such an alternative would necessarily cause greater environmental impact than the proposed action. Based on this criteria, construction of an entirely new facility, or renovation of other existing facilities, were not considered reasonable alternatives to consider. The only reasonable alternative is the "no action" alternative, which is required to be analyzed.

#### 3. AFFECTED ENVIRONMENT

#### 3.1. Land Use

Area N is a fully developed tract of land, supporting industrial, administrative, and warehouse facilities. Surrounding Building 820 are other maintenance and storage facilities, a facility heating plant, a dining hall, and aircraft parking ramp. Land use of non-Air Force property surrounding MSP IAP ARS consists of commercial airport operations to the south, east and west; other federal and state agency facilities to the east (Air National

Guard and Army Reserve, GSA-operated federal building, and Minnesota Department of Transportation administrative/maintenance facility), and state highway 62 and residential neighborhoods to the north.

#### 3.2. Geology, Physiography, and Soils

MSP IAP ARS is situated in a regional geologic structural depression known as the Twin Cities Basin. This regional depression is believed to have served as a depositional basin during the Precambrian, Cambrian, and Ordovician Ages. Pleistocene glacial drift and alluvium overlie the Ordovician bedrock formations in the vicinity of the airport and Air Force property. These bedrock formations are visible on the flat uplands of the international airport and Air Reserve Station as gentle eastward slopes, which terminate at the bluff along the Minnesota River. Slopes with gradients in excess of 10 percent do not occur in Area D. Soil borings have identified four separate bedrock formations beneath the international airport and the Air Reserve Station. These include Decorah Shale, Platteville Limestone, Glenwood Shale, and St. Peter Sandstone. The features of the bedrock are not considered to be a constraint to development. Naturally occurring soils in the vicinity of MSP IAP ARS include Dakota, Hubbard, and Estherville series. Soils of this type are loamy and well-drained. The actual occurrence of each type of soil cannot be confirmed because the Soil Conservation Service has never completed a soils survey at the installation. The Hennepin County Soil Conservation District, however, indicated that the large amount of development in the area has altered the original soil profiles. Prior to construction in undeveloped areas, the sites were graded. The topsoil was removed for landscaping use, and the loam of the silty mantle was removed to expose course materials that had better properties for construction. Fill dirt was used to replace the removed soils. As a result, the most common soil type consists of "Urban Land-Industrial, Sandy," which is considered to have no limitations for development.

## 3.3. Hydrology

Surface drainage from Area N is conveyed by a storm sewer system in either a northeasterly direction (connecting into the City of Minneapolis storm sewer system, ultimately discharging into the Mississippi River), or in a southeasterly direction (connecting into the Metropolitan Airports Commission's storm sewer, ultimately discharging into the Minnesota River). No sites are found in Area N that meet the definition of "wetlands" as promulgated by Executive Order 11990, Protection of Wetlands; nor do any sites in Area N meet the U.S. Army Corps of Engineers criteria to be considered wetlands. In addition, no portions of Area N are defined as flood plains in accordance with Executive Order 11988, Flood Plain Management. The uppermost artesian aquifer is found between 70 and 80 feet below the surface, imbedded in a layer of Platteville limestone that ranges between 50 and 80 feet in thickness. A layer of impermeable Decorah Shale caps the limestone in some undeveloped areas. Most of the shale, however, was removed during grading and construction of the installation. The aquifer drains to the Minnesota River. No wells are known to use this aquifer. A layer of impermeable Glenwood Shale about five feet thick is located beneath the Platteville Limestone and caps the St. Peter aquifer. The probability that surface water which percolates through the topsoil and limestone will permeate through two separate layers of limestone and shale into the St. Peter aquifer is extremely small; therefore, contaminants are generally not believed to be carried to this aquifer. The St. Peter aquifer provides high quality water and is used by some privately owned wells located west and south of the international airport. The widely used Prairie du Chien-Jordan aguifer is located 500 feet below the surface, beneath four layers of bedrock. This aguifer provides high quality water to several municipalities and private users in the metropolitan area. There are no water supply wells or aquifer recharge points on the installation, except surface water that infiltrates into the uppermost artesian aquifer. Due to the depth of the aquifers and their protective shale barriers, future development on the installation is not considered to be constrained by hydrologic characteristics.

#### 3.4. Vegetation

The vegetation found in Area N of MSP IAP ARS consists of landscaped turf-grass areas, native prairie-grass plantings, ornamental shrubs and bushes, deciduous and coniferous trees planted as part of the landscaping scheme, primarily in perimeter and street-side areas, and isolated deciduous trees allowed to remain in place as development of facilities occurred over the past fifty years. Tree species native to the area include types characteristic of upland forests. There are no known threatened or endangered plant species found in Area N.

#### 3.5. Wildlife

Area N is a developed industrial park-like complex. In 1992, the U.S. Fish and Wildlife Service (USFWS) assessed the potential for wildlife management activities in Area N. USFWS classified Area N as a "Category II" site, which is unsuitable for conserving and managing fish and wildlife. The limited habitat remaining is considered to be suitable only for songbirds and small non-game animals. The Minnesota Department of Natural Resources maintains a "Heritage Database" of known occurrences of federally and state listed threatened or endangered species (plants and animals), as well as other special natural features such as high quality plant communities, colonial waterbird nesting sites, etc. No state-listed or federally-listed threatened or endangered species, or other special natural features, are known to occur in Area N, or on any other Air Force-owned property at MSP IAP ARS.

#### 3.6. Historic and Cultural Resources

A cultural resources survey was conducted at MSP IAP ARS in 1995. No archeological resources were discovered during the survey. In addition, none of the facilities in Area N are eligible for nomination to the National Register of Historic Places. The survey was submitted to the State Historical Preservation Officer (Minnesota Historical Society) for review. The Minnesota Historical Society subsequently provided a letter documenting concurrence with the survey results.

#### 3.7. Air Quality

MSP IAP ARS is located in Hennepin County, which is part of the Minneapolis-St. Paul Intrastate Air Quality Control Region (AQCR) in Minnesota. The following attainment status designations for the Hennepin County portion of this AQCR are listed in the Code of Federal Regulations, Title 40, Chapter I, Subchapter C, Part 81, Section 81.324:

Total Suspended Particulate (TSP): Better than national standards Sulfur Dioxide (SO<sub>2</sub>): Better than national standards

Carbon Monoxide (CO): Attainment

Ozone (O<sub>3</sub>): Unclassifiable/Attainment Particulate Matter (PM<sub>10</sub>): Unclassifiable/Attainment

Nitrogen Dioxide (NO<sub>2</sub>): Cannot be classified or better than national standards

Lead: Not designated

The AQCR previously was classified as non-attainment for both SO<sub>2</sub> and CO; therefore the applicable status for these pollutants is "maintenance."

## 4. ENVIRONMENTAL IMPACTS OF ALTERNATIVES

## 4.1. Environmental Impact Categories

The proposed action and the "no action" alternative were each analyzed for potential individual and cumulative environmental impacts in each of the following categories:

- Noise Impacts
- ♦ Air Quality Impacts
- ♦ Water Quality Impacts
- ♦ Natural Resource Impacts
- ♦ Cultural Resource Impacts
- ♦ Safety/Occupational
- ♦ Health Impacts Waste Management
- ♦ Impacts Socioeconomic Impacts

♦ Environmental Justice Impacts

#### 4.2 Individual Impacts of the Proposed Action

Anticipated potential individual impacts from implementation of the proposed action are discussed in the following subsections. Potential cumulative impacts are addressed in Section 4.3. Impacts of the "no action" alternative are addressed separately in Section 4.4.

#### **4.2.1.** Noise Impacts

The construction that would occur for the proposed project would generate a short-term increase in noise from heavy equipment used during the excavation/site preparation phase of construction activity. However, the level of noise generated by this type of routine construction activity would have not have a significant impact the amount of equipment involved would be a maximum of two pieces, used for a very short period of time.

#### 4.2.2. Air Quality Impacts

The proposed action would result in a negligible, short-term increase in fugitive air emissions. Excavation and soil movement as necessary could create minor levels of dust during work periods. Additionally, emissions from heavy equipment (such as excavator, forklift), and contractor's personal vehicles would contribute to short-term increases in mobile source air emissions of criteria pollutants in the immediate area. Following the completion of the addition, long-term mobile source emissions of criteria pollutants would be identical to current emissions. Long-term stationary source emission of criteria pollutants would be only marginally increased over current emissions, due to the need to provide heat from the central boiler plant for an expanded facility. Therefore, the proposed action would not cause a significant impact to air quality.

MSP IAP ARS is within an air quality control region that is currently designated as "maintenance" for both CO and SO<sub>2</sub>. A conformity applicability analysis was performed to compare projected emissions from the proposed project to the specified conformity determination thresholds found in 40 CFR 93.153(b)(2). The conformity applicability analysis is provided in Appendix A. Assumptions used for the analysis calculations were purposely made extremely liberal, i.e. they show emissions far in excess of what will actually occur. As shown in Appendix A, the projected maximum annual emissions of both CO and SO<sub>2</sub> are well below the thresholds of 100 tons per year for each of the two pollutants. Emissions in the initial year (construction phase) would by a maximum of 4.52 tons of CO and 0.2 tons of SO<sub>2</sub>. Emissions in the follow-on (operational) years would not vary from the present emissions. Therefore, a conformity determination is not required.

## **4.2.3.** Water Quality Impacts

The proposed action would not result in significant changes in the volume or quality of storm water runoff from the site. Construction of an addition to the facility would require collection and drainage of storm water from the additional roof. The existing storm sewer system for run off from Area N is capable of handling the storm water flows from the proposed project. Periodic sampling of storm water effluent from this portion of Area N has found no permit violations over the past two years. No pollutant increase in the storm water runoff would be expected in the long term. In the short-term, the potential exists for increased suspended solids loading of the storm water during the construction phase. In regard to groundwater, the facility is connected to the existing Area N domestic water supply system. No groundwater wells would be used as a water source. The functions and activities at this site do not represent any potential for groundwater contamination. Therefore, no groundwater impacts are identified.

#### **4.2.4.** Natural Resource Impacts

Area N has no wetlands, floodplains, rivers, streams or other bodies of water. Area N has no forested areas. As discussed in Section 3.5., the property is classified as a "Category II" site, which is unsuitable for conserving and managing fish and wildlife. There are no known or suspected occurrences within Area N of any state-listed or

federally-listed endangered or threatened species, or other special natural features. Therefore, there are no anticipated natural resource impacts that would result from the proposed action.

#### 4.2.5. Cultural Resource Impacts

As previously described in section 3.6., Area N has no known or suspected cultural resources, archeological resources, or National Register-eligible properties or structures. Therefore, there are no anticipated cultural resource impacts that would result from the proposed action.

## 4.2.6. Safety/Occupational Health Impacts

The proposed action would not result in any change to the mission, functions or activities that will be performed within the facility. No changes in work practices would be necessary to achieve an adequate level of health and safety. Therefore, no potential safety or occupational health impacts were identified as resulting from the proposed action.

## 4.2.7. Waste Management Impacts

The proposed action would result in a short-term increase in the volume of construction debris generated from Area N. Using data published by the U.S. Environmental Protection Agency, an estimate of the quantity of debris that might be generated from construction of an 3,230 square foot facility addition is 6 tons. In regard to long-term waste generation, the current facility use and function is expected to remain the same as at present. The solid waste materials and volumes that will be generated from activities within the building are anticipated to be consistent with materials and volumes currently generated. Therefore, no long-term impacts to waste management are anticipated.

## 4.2.8. Socioeconomic Impacts

Short-term socioeconomic impacts resulting from the proposed action are opportunities for construction-related private sector employment during the facility construction project. Estimated construction-related employment by private contractors would not be anticipated to exceed 20 individuals at any given time over a period not exceeding one year. No long-term socioeconomic impacts from the proposal are anticipated.

#### **4.2.9.** Environmental Justice Impacts

No people will be displaced by this proposed action. The "impact footprint" of the proposed action would be confined to the immediate vicinity of the Building 820, entirely within Area N. Area N is located within Census Tract 121.02, Block Group 2, Hennepin County, Minnesota. The 2000 census data for the block group shows a population that is 69% white. The 2000 Census data showed that 2.6% of the households within the tract had a household income below the poverty level during 1999. Therefore, there would be no disproportionate effect from the proposed action on either minority populations or low-income populations.

## 4.3. "Cumulative Impact" Assessment

"Cumulative impact" is defined in 40 CFR 1508.7 as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 CFR parts 1500 through 1508 contain no explicit guidance on how to establish an appropriate geographic area of consideration, nor how to establish an appropriate chronological timeframe of consideration. There is also no such explicit guidance provided in the Air Force's implementing regulations promulgated at 32 CFR Part 989.

#### 4.3.1. Identification of Relevant Past Actions

In order to perform the analysis with some degree of reasonableness, the criteria used to select which past actions should be included in the analysis of cumulative impacts was new facility construction projects that occurred on MSP IAP ARS property, or on property adjacent to Area N of MSP IAP ARS, within the past five years (1998 to present). The new facility construction projects that occurred during this timeframe were:

- ◆ Combat Arms Training Simulator, Building 862, Area N, 1998
- Military Clothing Sales Store, Building 756, Area N, 1998
- ♦ Cold Storage, Building 723, Area N, 1999
- ♦ Fitness Center, Building 777, Area N, 1999
- ♦ Cold Storage, Building 724, Area N, 2000
- ♦ Consolidated Lodging Facility (Phases 1& 2), Building 707, Area N, 2001

The new facility construction projects listed above were all federal actions. During the past five-year timeframe, no other federal, non-federal, or private construction projects are known to have been completed on MSP IAP ARS property, or on property adjacent to Area N of MSP IAP ARS.

#### 4.3.2. Identification of Relevant Present Actions

Currently, there are two new military facility construction projects occurring on Area N. Additionally, there is one major transportation construction project that is occurring (partially) on Air Force property, as well as a major airport expansion on property adjacent to Area N. These projects are:

- ◆ Consolidated Lodging Facility (Phase 3 & 4), Building 707, Area N: The third and fourth phase of construction of a 90,128 square foot facility, with subsequent demolition of three (3) existing substandard facilities. Two of these facilities (buildings 711 and 716) were previously used as lodging facilities. An Environmental Assessment was prepared in 1998, and resulted in a Finding of No Significant Impact. The first two phases of construction occurred in 2000-2001.
- ♦ Minneapolis-St. Paul International Airport Expansion: Expansion and development of the airport facilities as necessary to meet the forecasted regional aviation needs. The expansion was evaluated by the Federal Aviation Administration and Metropolitan Airports Commission, through a seven-year process that culminated in a final environmental impact statement published in 1998. The evaluated expansion included new runway construction, extension of an existing runway, a new replacement terminal building, and additional air cargo and maintenance facilities.
- ♦ Construct Centralized Recycling Facility, Area N: Construction of a 4,000 square foot metal building to house recycling equipment, and process and store accumulated recyclable materials. Construction began in December 2002. An Environmental Assessment was prepared in 2001, resulting in a Finding of No Significant Impact.

#### 4.3.3. Identification of Relevant Reasonably Foreseeable Future Actions

The following projects is the single other federal, non-federal, or private construction project known to be planned Area N, or property adjacent to Area N. This projects is "reasonably foreseeable" because funding has already been obtained. Projects for which funding has been requested, but which currently have no funding forecasted for the next five years, are not considered "reasonably foreseeable."

• Extend Aircraft Ramp: 13,000 square meters of usable ramp space will be added to the existing aircraft ramp. Construction is anticipated for 2003.

#### 4.3.4. Noise Impacts

PAST: Each of the past construction projects have been completed, with the facilities in use for their intended purpose. Additionally, the function of the facilities and the types of activities performed in and around them do not generate any noise impacts that could be considered significant. Therefore, no past construction-related or operational noise would be cumulative with noise generated by construction and facility use under the proposed action.

PRESENT: Negligible noise impacts were identified for the Consolidated Lodging Facility construction. The evaluation of the Minneapolis-St. Paul International Airport Expansion identified "unavoidable adverse" noise impacts to the surrounding communities resulting from the airport expansion. However, the noise is primarily generated by aircraft operations. No discussion of construction-related noise was included. An extensive noise mitigation program was described, which has been undertaken by the Metropolitan Airports Commission. The mitigation program relies heavily on systematic insulation of residential housing units within established noise contours. The implementation of this program has reduced any potential for construction-related noise to significantly impact nearby residential areas. For the Centralized Recycling Facility, no noise impacts were identified in the EA. Therefore, no significant cumulative noise impacts will result from the proposed action when considered in conjunction with these other present actions.

FUTURE: Future construction can be anticipated to generate short-term noise increases similar to the past and present construction projects. Due to the location of the properties involved (adjacent to the airport, without residential neighborhoods in close proximity), and the ongoing implementation of the previously described noise mitigation program, the planned future construction projects will not have a significant cumulative noise impact when considered in conjunction with the proposed action.

### 4.3.5. Air Quality Impacts

PAST: Construction-related fugitive and mobile source emissions that occurred during past construction projects have ceased. All such emissions were temporary, and determined to be negligible in past analyses. Therefore, those past emissions will have no cumulative impact with similar construction-related emissions from the proposed action. In regard to emissions from the activities that occur in the facilities constructed previously and associated mobile source emissions, these have not resulted in the need to re-establish facility air emission permits, nor have they impacted the attainment status of the air quality control region. The calculations used for the conformity applicability analysis indicate that the proposed project will not affect the attainment status of the air quality control region. Therefore, there are no significant cumulative air quality impacts from the proposed action when combined with the past actions.

PRESENT: Analysis of the consolidated lodging facility construction anticipated short-term negligible air quality impacts. Analysis of the international airport expansion determined that neither the construction phase nor the post-construction operation of the expanded facility would result in air emissions over the 100 tons per year amounts established as the "de minimis" thresholds for carbon monoxide and sulfur dioxide. Analysis of the Centralized Recycling Facility construction identified no negative air quality impacts. Therefore, no significant cumulative air quality impacts will result from the proposed action when considered in conjunction with these other present actions.

FUTURE: The future construction project (Aircraft Ramp Extension) will cause negligible short-term increases in fugitive air emissions as well as short-term increases in mobile source emissions (from contractor vehicle activity). Based on the results derived from the assumptions in the conformity applicability determination for the current proposed project and the future project, the combined air emissions will also fall below the "de minimis" thresholds. Construction of a new stationary emissions source that would require additional permitting under existing state or federal regulations is not part of the future project. Therefore, there are no foreseeable significant cumulative impacts of the future project when considered in conjunction with the current proposed action.

## 4.3.6. Water Quality Impacts

PAST: Construction-related impacts from the past construction projects were temporary increases in suspended solids loading to stormwater runoff while soil was disturbed on site. The majority of the facilities were constructed on sites that included some turfed areas. Long-term impacts resulting from the presence of these facilities consists of increases in the volume of stormwater runoff, due to additional presence of impervious surfaces in those cases. Such flow increases have not caused any problems with adequate drainage of runoff from Area N, nor required expansion of drainage system capacity, indicating that the increases to flow volumes have been minor. Results of stormwater sampling conducted on a quarterly basis, including analysis of total suspended solids and hydrocarbons, have shown no degradation of water quality over the past five year period. Therefore, there are no cumulative water quality impacts from the proposed action when combined with the past actions.

PRESENT: Due to the non-industrial nature of the operation that would occur at the consolidated lodging facility, the EA for that facility anticipated no pollutant increase in the storm water runoff in the long term. Shortterm increases in total suspended solids loading of the storm water runoff were anticipated to occur during construction and demolition activities. The environmental impact statement for the airport expansion included an extensive analysis of impacts to surface water quality from various airport related activities. The document concluded that the airport expansion would not adversely impact surface water quality when compared to not expanding. Impacts from the airport expansion construction were documented as potential from solvent or fuel spills on site and potential for soil erosion. Mitigation measures to be used were specified as special handling and care of all potentially dirty water or hazardous materials, construction of special sedimentation ponds, designated maintenance areas for construction equipment, and use of various erosion control techniques. Assessment of the construction and operation of the centralized recycling facility identified only the potential for short-term negligible impacts to storm water, similar to those identified as possible from the current proposed project. In consideration of the use of mitigation measures for the ongoing major projects, and the minimal individual impacts anticipated from the proposed action, the cumulative impacts are not considered to be significant. Since none of the major ongoing projects anticipated significant impacts to water quality as their result, there is no potential for a cumulative significant impact to be caused by taking the proposed action being addressed in this environmental assessment.

FUTURE: The assessment of the aircraft ramp extension did not identify any significant impacts to water quality. Assuming that future construction projects continue to have erosion and sedimentation control measures incorporated into their design and work specifications, no significant cumulative impacts to water quality will occur.

## 4.3.7. Natural Resource Impacts

PAST: Due to the lack of natural resources for the project area, as described in Section 3.5., there have been no natural resources impacts resulting from facility construction projects over the past five years. Additionally, as described in section 4.2.4., there are no such impacts anticipated from the proposed action. Therefore, no cumulative natural resource impacts will occur.

PRESENT: Due to the lack of natural resources for the project area, there is no potential for cumulative impacts to result from the proposed action in conjunction with the other ongoing projects.

FUTURE: Due to the lack of natural resources for the project area, there is no potential for cumulative impacts to result from the proposed action in conjunction with the reasonably foreseeable future projects.

## **4.3.8.** Cultural Resource Impacts

PAST: Due to the lack of cultural resources for the project area, as described in Section 3.6., there have been no cultural resources impacts resulting from facility construction projects over the past five years. Additionally, as

described in section 4.2.5., there are no such impacts anticipated from the proposed action. Therefore, no cumulative cultural resource impacts will occur.

PRESENT: Due to the lack of cultural resources for the project area, there is no potential for cumulative impacts to result from the proposed action in conjunction with the other ongoing projects.

FUTURE: Due to the lack of cultural resources for the project area, there is no potential for cumulative impacts to result from the proposed action in conjunction with the reasonably foreseeable future projects

## 4.3.9. Safety/Occupational Health Impacts

PAST: No significant changes to the mission, functions or activities conducted on MSP IAP ARS have occurred as a result of the facility construction projects completed within the past five years. Additionally, no changes in work practices were required to achieve an adequate level of health and safety. As described in section 4.2.6., no potential safety or occupational health impacts are expected to result from the proposed action. Therefore, no cumulative safety or occupational health impacts resource impacts will occur.

PPRESENT: No potential safety or occupational health impacts are expected to result from the proposed action; therefore there is no potential for cumulative impacts from the proposed action in conjunction with the other ongoing projects.

FUTURE: No potential safety or occupational health impacts are expected to result from the proposed action. Reasonably foreseeable projects of a similar nature would also not be expected to cause any safety or occupational health impact. Therefore there is no potential for cumulative impacts from the proposed action in conjunction with the reasonably foreseeable future projects.

## 4.3.10. Waste Management Impacts

PAST: The facility construction projects completed over the past five years each caused temporary increases in the volume of construction debris generated from MSP IAP ARS. Only two of the facilities house activities or operations not previously performed on base (the fitness center and the Military Clothing Sales Store). Neither of these two facilities contributes significant amounts to the ongoing, long-term solid waste volumes generated at MSP IAP ARS. Most of the waste stream from the Military Clothing Sales Store consists of cardboard, which is recycled. The inevitable generation of construction debris from the current proposed action, when considered in conjunction with past volumes, does not constitute a significant impact to the state or regional waste disposal capacity because of its temporary duration. The long-term impact to waste generation from the combined facilities and the proposed expanded facility is negligible.

PRESENT: The consolidated lodging facility project was anticipated to result in substantial, but short-term, increases in demolition debris, due to the demolition of the substandard buildings that are to be torn down. No significant waste management impacts were identified in the documentation for the airport expansion project. No impacts were identified in the assessment of the centralized recycling facility project. The negligible impacts anticipated from the proposed action do not indicate a cumulative significant impact would occur when considered in conjunction with the ongoing major projects.

FUTURE: The aircraft ramp extension is not anticipated to cause waste management impacts. Therefore, no significant cumulative impact is anticipated.

## 4.3.11. Socioeconomic Impacts

PAST: The short-term socioeconomic impacts that resulted from the facility construction projects over the past five years are similar to the short-term impacts anticipated to occur from the proposed action. The cumulative socio-economic impact, while positive, remains insignificant in the context of the Twin Cities metropolitan area.

PRESENT: The proposed action has no potential for significant socioeconomic impacts. Therefore, no cumulative socioeconomic impacts will result from the proposed action when considered in conjunction with the other ongoing projects in the area.

FUTURE: The proposed action has no potential for long-term socioeconomic impacts. The reasonably foreseeable future projects likewise are not anticipated to have long-term or significant socioeconomic impacts. Therefore, no cumulative socioeconomic impacts will result from the proposed action when considered in conjunction with the reasonably foreseeable future projects in the area.

#### **4.3.12.** Environmental Justice Impacts

PAST: The facility construction projects over the past five years have had the same or adjoining census tracts as the proposed action for their area of potential effect. Based on the census data cited in section 4.2.9., the past projects have not disproportionately affected minority populations or low-income populations. No cumulative environmental justice impact would occur as a result of the proposed action .

PRESENT: The proposed action would not disproportionately affect minority populations or low-income populations. Therefore, there is no potential for the proposed action to cause any cumulative effect to these populations when considered in conjunction with the ongoing projects in the area.

FUTURE: The proposed action would not disproportionately affect minority populations or low-income populations. Reasonably foreseeable future actions in the same area also will not disproportionately affect minority populations or low-income populations. Therefore, there is no potential for the proposed action to cause any cumulative effect to these populations, when considered in conjunction with the reasonably foreseeable future actions.

## 4.4. Impacts of the "No Action" Alternative

The facility to be expanded under the proposed action is currently used for the same function that it will be used for after completion of the expansion. Currently, no significant environmental impacts are occurring as a result of the current situation. The "No Action" alternative, in which no facility construction occurs, would result in no change in existing the environmental conditions. Air emissions would remain consistent with current emissions. Surface water runoff volume and quality would remain constant. There would be no potential for impacts of any kind to natural or cultural resources. Safety/occupational health conditions, waste generation and management, socioeconomic conditions, and conditions related to "environmental justice" would all remain identical to their current conditions. Therefore, no environmental impacts, either individual or cumulative, are identified as potentially resulting if the "No Action" alternative is taken.

## 5. RECOMMENDATION

Analysis of the proposed action indicates that the potential individual environmental impacts that would result from its implementation will not significantly impact the environment. Additionally, in considering the proposed action in conjunction with other relevant past, present, or reasonably foreseeable future actions, no potential cumulative impacts were identified that would significantly impact the environment. The term "significantly" is

used here in the same sense in which it is defined in 40 CFR 1508.27. The impacts identified for this proposed action are not "significant" in either their context or their intensity. Implementation of the proposed action would not cause a potential for significant degradation to the environment, nor would it cause a potential for significant threat or hazard to public health and safety. Implementation of the proposed action would also not result in substantial environmental controversy concerning the significance or nature of the identified environmental impacts. Therefore, preparation of an Environmental Impact Statement is not necessary prior to a decision on the proposed action. Documentation of a "Finding of No Significant Impact" (FONSI) is recommended. A suitable FONSI is provided as Appendix B of this document.

## 6. REFERENCES

Cultural Resources Survey Report, Minneapolis-St. Paul International Airport Air Reserve Station, Science and Engineering Associates, Inc., September 1995

Environmental Assessment MSP-EA-96001, Construct and Operate Military Clothing Sales Store, 934<sup>th</sup> Airlift Wing, 13 November 1995.

*Environmental Assessment MSP-EA-97003, Construct Cold Storage Buildings*, 934<sup>th</sup> Airlift Wing, 7 February 1997

Environmental Assessment MSP-EA-97013, Construct Combat Arms Training Simulation Facility, 934<sup>th</sup> Airlift Wing, 11 December 1997

Environmental Assessment MSP-EA-98003, Proposed Construction of Consolidated Lodging Facility, 934<sup>th</sup> Airlift Wing, 27 July 1998

Final Environmental Assessment MSP-EA-02-08, Proposed Addition/Alteration to Communications Building 761, 934<sup>th</sup> Airlift Wing, 03 September 2002

Final Environmental Assessment MSP-EA-02-13, Extend Aircraft Ramp, 934th Airlift Wing, 02 December 2002

Final Environmental Impact Statement, Dual Track Airport Planning Process – Twin Cities Metropolitan Area, Federal Aviation Administration and Metropolitan Airports Commission, May 1998

Finding of No Significant Impact for Proposed Runway 4-22 Extension, Minneapolis-St. Paul International Airport, Federal Aviation Administration, 14 April 2000

Natural Communities and Rare Species of Carver, Hennepin, and Scott Counties, Minnesota (Map), Minnesota Department of Natural Resources, 1998

#### 7. PUBLIC NOTIFICATION AND EXTERNAL AGENCY CONSULTATION

32 CFR 989.24 states that an environmental assessment requires public notification, and that for "actions of local concern," public notification may be limited to the state Single Point of Contact, local government representatives, and local news media. The proposed Air Force action analyzed in this document is considered by the 934<sup>th</sup> Airlift Wing to be an "action of local concern." Therefore, public notification was made to the state Single Point of Contact and relevant state and local government representatives listed below, via submittal of a copy of the draft environmental assessment. Notice of the availability of the draft was also provided to local news media by the 934<sup>th</sup> Airlift Wing's Public Affairs Office, and was published in the Minnesota Environmental Quality Board's *EQB Monitor*. The proposed action does not have a mandatory public review period. Therefore, only "notification" of the local media was required.

32 CFR 989.14 requires the Air Force to involve other federal agencies, state, tribal, and local governments, and the public, in the preparation of environmental assessments, and states that the extent of involvement usually coincides with the magnitude and complexity of the proposed action and its potential environmental effect on the area. Through the public notification efforts described above, the following agencies and members of the public were invited to participate in the preparation of this environmental assessment through review of the draft and submittal of comments. Comments were accepted until 20 February 2003. The only comment letter received, from the Minnesota Historical Society, is included on the following page.

Environmental Quality Board 300 Centennial Office Building 658 Cedar Street St. Paul, MN 55155

Minnesota Department of Natural Resources Environmental Review Unit 500 Lafayette Road St. Paul. MN 55155-4010

Minnesota Pollution Control Agency Regional Environmental Management Division Operations and Environmental Review Section 520 Lafayette Road, St. Paul, MN 55155-4194

Minnesota Historical Society State Historic Preservation Office 345 Kellogg Boulevard West St. Paul, MN 55102-1906

Metropolitan Council Attn: Chauncey Case 230 E. Fifth Street St. Paul, MN 55101 Metropolitan Airports Commission Lindbergh Terminal, Room 325 Minneapolis-St. Paul International Airport St. Paul. MN

City of Minneapolis
Planning Department
350 South 5th Street
Minneapolis, MN 55415

Hennepin County Planning Department, Suite A-2308 300 South 6th Street Minneapolis, MN 55487

Lower Minnesota River Watershed District 200 4<sup>th</sup> Avenue West Shakopee, MN 55379

#### **Appendix A Conformity Applicability Analysis**

Proposed Project: Proposed Addition to Aerospace Ground Equipment Shop

#### Initial Year Assumptions (Facility Construction Phase, all mobile sources):

- 1. Total construction takes six months (26 weeks), with work done on 5 days per week.
- 2. The project employs 20 construction personnel per day.
- 3. Each worker commutes an average of 30 miles each way.
- 4. All workers drive Light-Duty Gasoline-fueled Truck POVs to/from the work site.
- 5. Two pieces of construction equipment are used on the job, every work day.
- 6. Each piece of construction equipment uses 50 gallons of fuel per day.
- 7. One other heavy-duty diesel truck is used in the project every day.
- 8. The heavy-duty diesel truck travels 100 miles/day.
- 9. Two deliveries of materials/supplies are made to the site each day.
- 10. Each delivery is made by a heavy-duty diesel truck, which has a round trip of 100 miles.

POV commute emissions						
Number of	Miles/day	Emission	Grams to	Total	Total	
workers	commuted	factor	pounds	Days	Pounds	
	per worker	CO gr/mile	conversion	in project	Emissions	
20	60	18.49	0.0022	130	6346	
	No emission factor for SO <sup>2</sup>					

Construction equipment emissions					
	Gallons of	Emission	Emission	Total	Total
Pieces of	fuel/day	factor CO	factor SO <sup>2</sup>	days	Pounds
equipment	per equip.	lb/gal.	lb/gal.	in project	Emissions
2	50	0.133		130	1729
2	50		0.0312	130	406

Heavy-duty diesel truck emissions						
	Miles/day	Emission	Grams to	Total	Total	
Number of	traveled	factor	pounds	Days	Pounds	
trucks	per truck	CO gr/mile	conversion	in project	Emissions	
1	100	11.22	0.0022	130	321	
No emission factor for SO <sup>2</sup>						

Delivery truck emissions (HDDV)						
Number of	Miles/day	Emission	Grams to	Total	Total	
delivery	traveled	factor	pounds	Days	Pounds	
trucks	per truck	CO gr/mile	conversion	in project	Emissions	
2	100	11.22	0.0022	130	642	
No emission factor for SO <sup>2</sup>						

Total estimated CO emissions (lb):	9038
Total estimated CO emissions (tons):	4.52
Total estimated SO <sup>2</sup> emissions (lb):	406
Total estimated SO <sup>2</sup> emissions (tons):	0.2

Note: Emission factors for various vehicle types were provided by Ecology & Environment Inc., under contract to HQ AFRC/CEV.

Follow-on year emissions would not vary from present emissions.

## Appendix B

## Finding of No Significant Impact Environmental Assessment MSP-EA-03-01

## Proposed Addition to Aerospace Ground Equipment Shop

## **Description of Proposed Action and Alternative**

The proposed action is construction of an addition to an existing building at Minneapolis-St. Paul International Airport Air Reserve Station (MSP IAP ARS). The existing building, 820, houses Aerospace Ground Equipment (AGE) maintenance activities. The "no action" alternative was also analyzed.

#### **Summary of Environmental Impacts**

Environmental Assessment MSP-EA-03-01, which is hereby incorporated by reference, documents anticipated environmental impacts that would result from implementation of this proposed action. The potential individual impacts are summarized as follows:

- Negligible short-term increase in construction-related noise.
- Negligible short-term increase in fugitive and mobile source air emissions during construction activity. All
  such emissions are less than the applicable thresholds specified in 40 CFR 93.153(b)(2); therefore, a
  conformity determination is not required.
- · Potential short-term increases in suspended solids in storm water runoff.
- Short-term increase in generation of construction debris.
- Creation of short-term construction-related employment opportunities for local private sector laborers.

The "no action" alternative would have no environmental impacts. Analysis of the potential for significant cumulative impacts with other past, present, and reasonably foreseeable future federal, non-federal and private actions identified no such significant cumulative impacts.

#### Conclusions

Approval Signature:

Analysis of the proposed action indicates that the potential individual and cumulative environmental impacts that would result from its implementation are negligible. Implementation of the proposed action would not cause a potential for significant degradation to the environment, nor would it cause a potential for significant threat or hazard to public health and safety. Implementation of the proposed action would also not result in substantial environmental controversy concerning the significance or nature of the identified environmental impacts. No mitigation actions would be necessary for the proposed action. Preparation of an Environmental Impact Statement is not necessary prior to a decision on the proposed action.

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GARY L. COOK, Colonel, USAFR

Date